ABSTRACT

A substrate is made of single crystal silicon and having a tuning folk shape. The substrate includes plural arms extending in parallel with each other and a joint section for connecting respecting ends of the arms with each other. An angular velocity sensor includes a barrier layer containing silicon oxide provided on each of the arms of the substrate, a first adhesion layer containing titanium provided on the barrier layer a first electrode layer containing at least one of titanium and titanium oxide provided on the first adhesion layer, an orientation control layer provided on the first electrode layer, a piezoelectric layer provided on the orientation control layer, a second adhesion layer provided on the piezoelectric layer, and a second electrode layer provided on the second adhesion layer. This angular velocity sensor has a small size and stable characteristics.